HYDROTECHNICAL RESEARCH OF A SECTOR GATE

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The article deals with the hydraulic and structural assessment of a sector gate in Děčín and Český Krumlov based on the evaluation of experimental measurements performed on a physical hydraulic model In the Water Management Laboratory of the Faculty of Civil Engineering, CTU in Prague. The hydrotechnical investigation describes the measurement of levels, discharges and pressures in the spillway. Many types of technical options of the spillway modifications were evaluated on the model. The capacity of the spillway structure is influenced by the operation of the gates. Standard hydraulic formulas cannot be regarded as accurate enough considering the size and importance of the entire hydraulic structure. For the reasons mentioned above the simplified theoretical calculations were validated on the physical hydraulic model.